## WHAT IS CLAIMED IS:

from the additional memory blocks.

1. A method for providing dynamic memory management of a memory device, the method comprising:

providing a first memory block in the memory device; storing a startup program in the first memory block; providing additional memory blocks; and connecting the first memory block and the additional memory

blocks by a chained list;
wherein the chained list is executed upon checking the
memory device and the startup program obtains data for a check

- 2. The method of claim 1, wherein the checking is performed using an addition checksum.
- 3. The method of claim 1, wherein the checking is performed by a cyclic block backup.
- 4. The method of claim 1, wherein the checking is performed at a time of booting a system that includes the first memory block and the additional memory blocks.
- 5. The method of claim 1, wherein the checking is performed in the background during operation of a system that includes the first memory block and the additional memory blocks.
- 6. A memory device, comprising: a first memory block to store a startup program; and additional memory blocks to store data for a check; wherein the first memory block and the additional memory blocks are connected by a chained list.
- 7. The memory device of claim 6, wherein each of the additional memory blocks includes an information area that stores information on the memory block itself and a checking area that stores information for performing the check.

- 8. A system, comprising:
  - a computing unit;

a memory device including a first memory block to store a startup program; and

additional memory blocks to store data for a check; wherein the first memory block and the additional memory blocks are connected by a chained list.

- 9. The system of claim 8, wherein the memory device includes a non-volatile memory module.
- 10. The system of claim 8, wherein the computing unit includes an embedded microcontroller.
- 11. A computer program including program code for providing dynamic memory management of a memory device, the program code being executable in a computing arrangement to perform the following:

providing a first memory block in the memory device; storing a startup program in the first memory block; providing additional memory blocks; and

connecting the first memory block and the additional memory blocks by a chained list;

wherein the chained list is executed upon checking the memory device and the startup program obtains data for a check from the additional memory blocks.

12. A computer-readable storage medium including program code for providing dynamic memory management of a memory device, the program code being executable in a computing arrangement to perform the following:

providing a first memory block in the memory device; storing a startup program in the first memory block; providing additional memory blocks; and connecting the first memory block and the additional memory blocks by a chained list;

wherein the chained list is executed upon checking the memory device and the startup program obtains data for a check from the additional memory blocks.